


# NPP – MODIS match up

Initial Look

November 30, 2011

Ocean color team

Obtained NPP data from GRAVITE

SR  ADL to SDR than through l2gen ( level 2 generator for the Navy algorithm

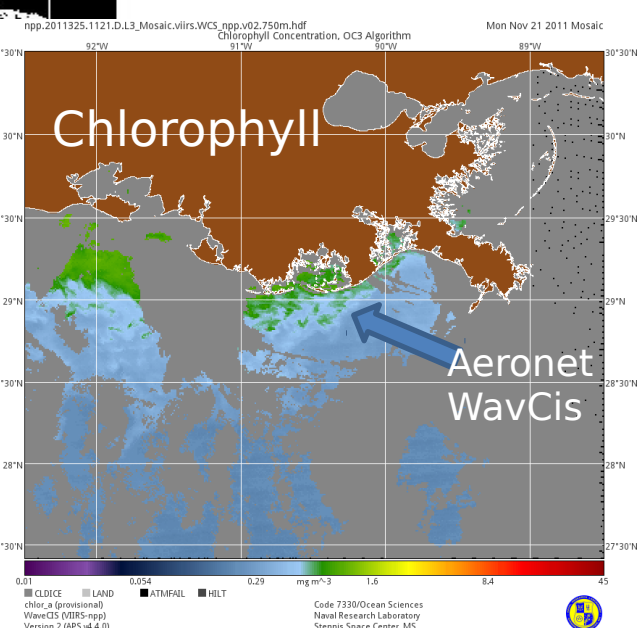
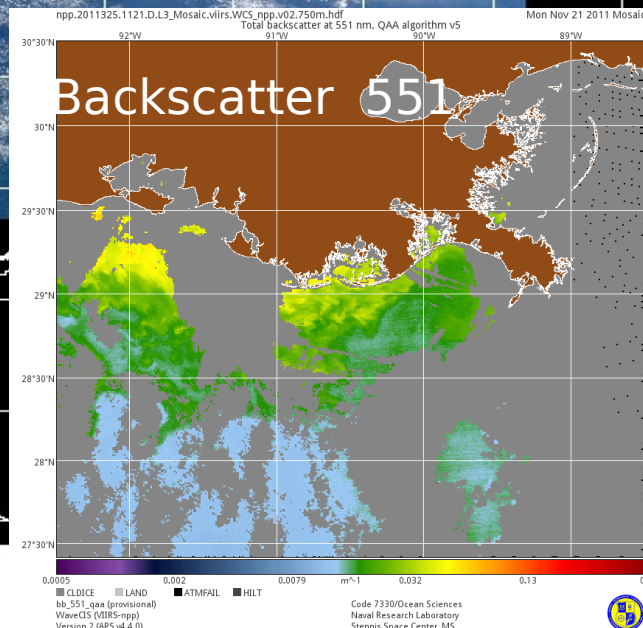
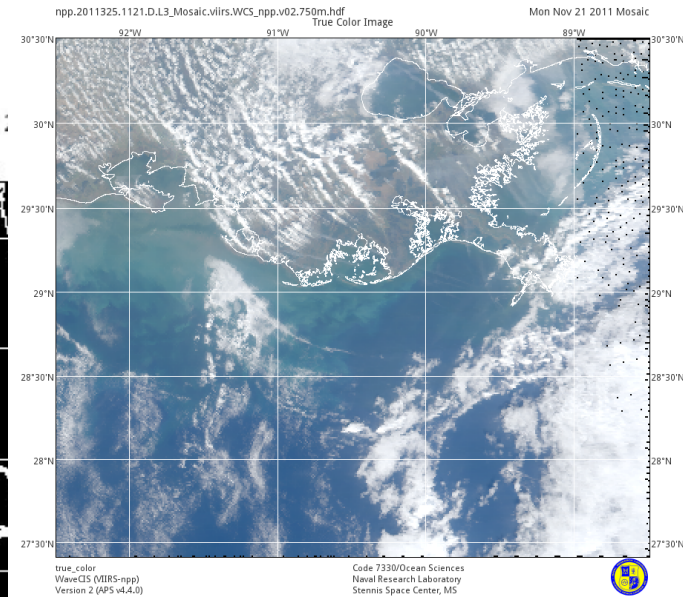
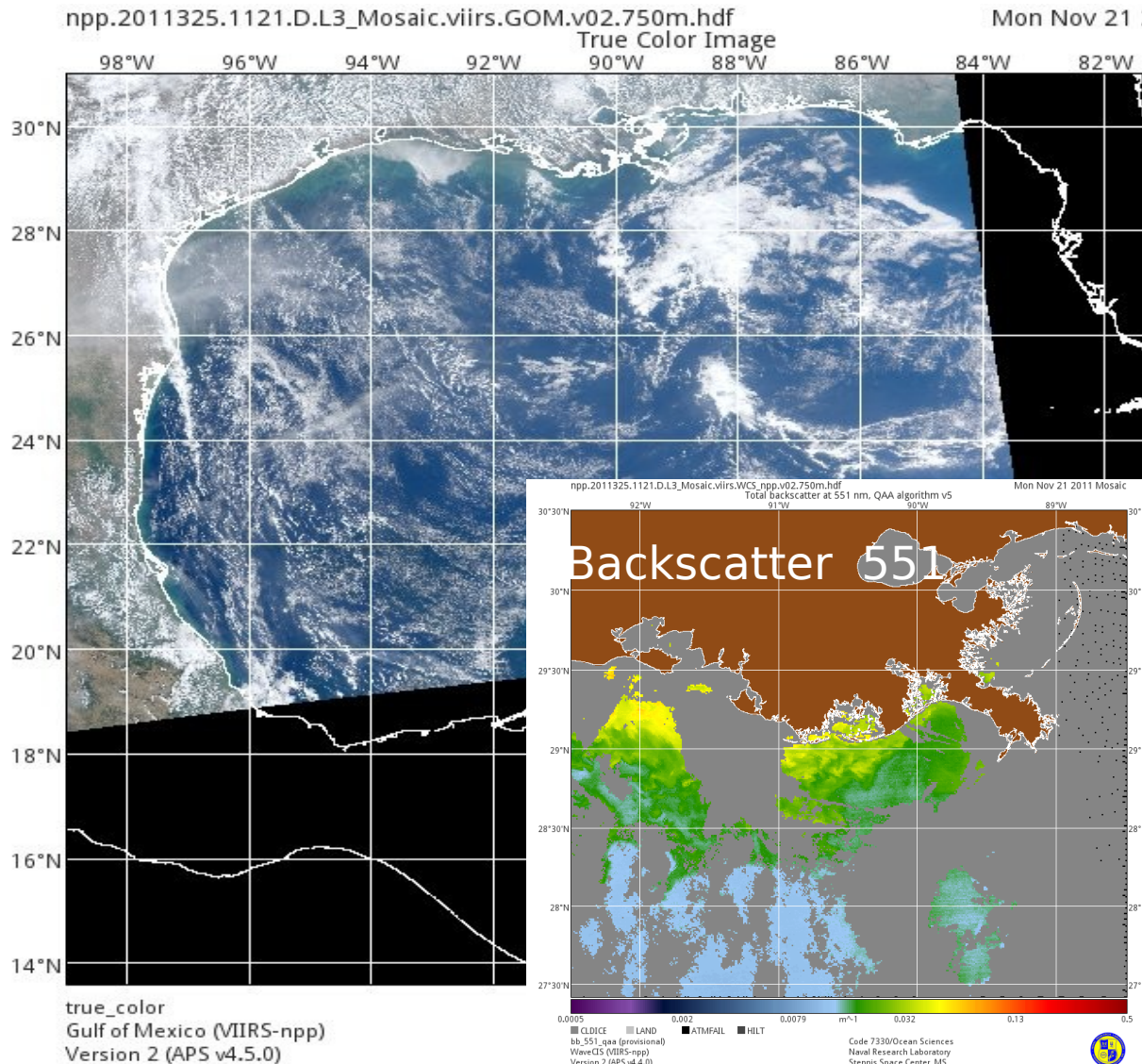
NRL Team

P. Martinolich, S. Ladner, R. Arnone

# NPP ocean color products

- Processed NPP data through ADL and into nl2gen to EDR\*
  - Govn't processing of ocean color products using in MODIS
    - EDR\* include nLw(l), chl, qaa (bb,a etc)
- Obtained the EDR from IDPS.
  - Evaluating the EDR – nLw(l), chl, bb, absorption

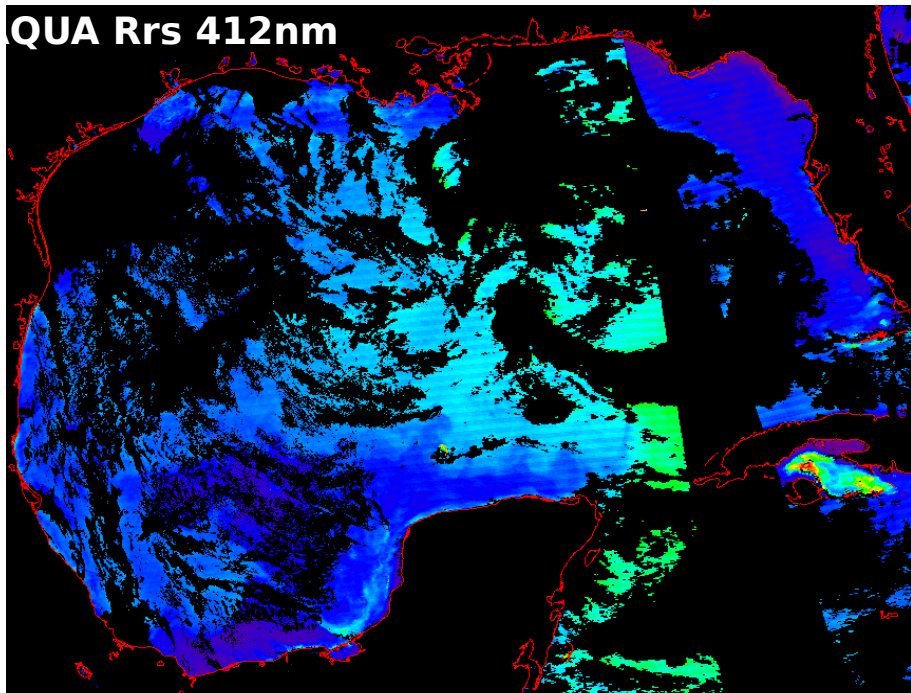
# NPP - VIIRS True color Gulf of Mexico



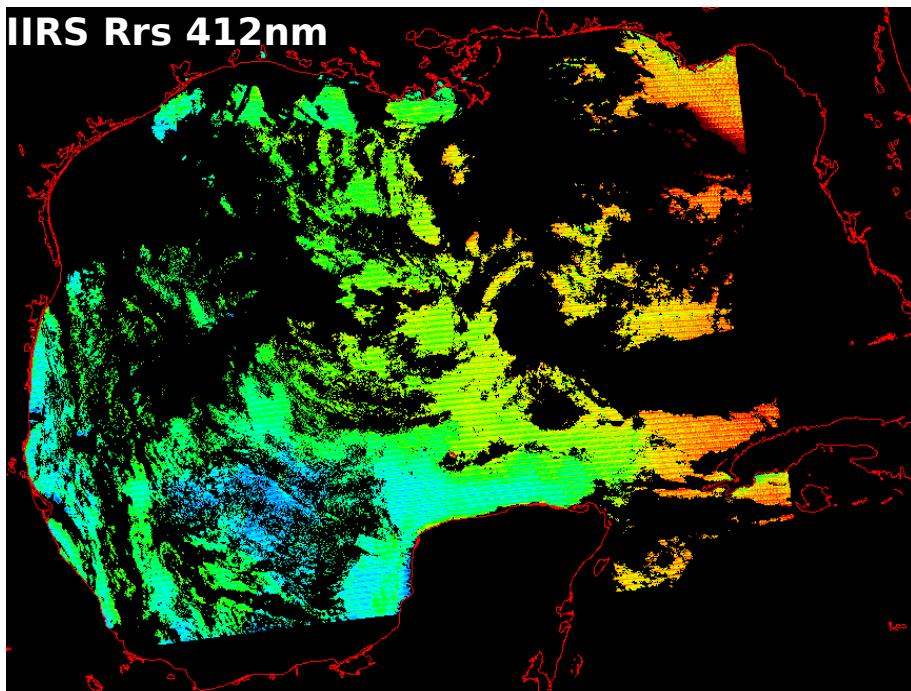
# **Comparison NPP and MODIS Products**

Govn't EDR- processing

**QUA Rrs 412nm**



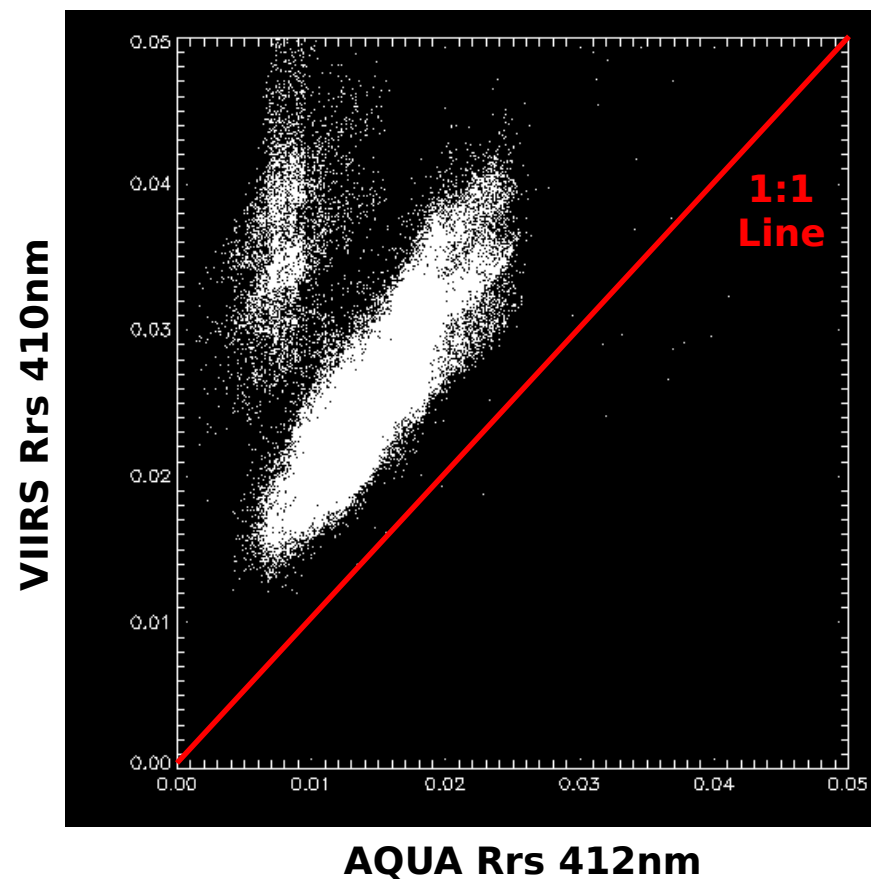
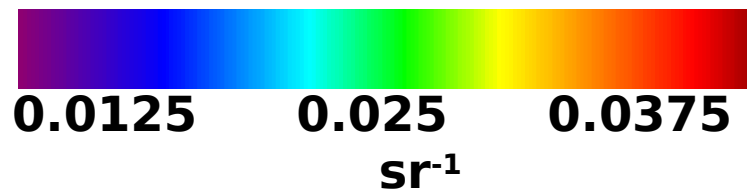
**VIIRS Rrs 412nm**



# MODIS Aqua / VIIRS Matchup November 21, 2011 (JDAY 325)

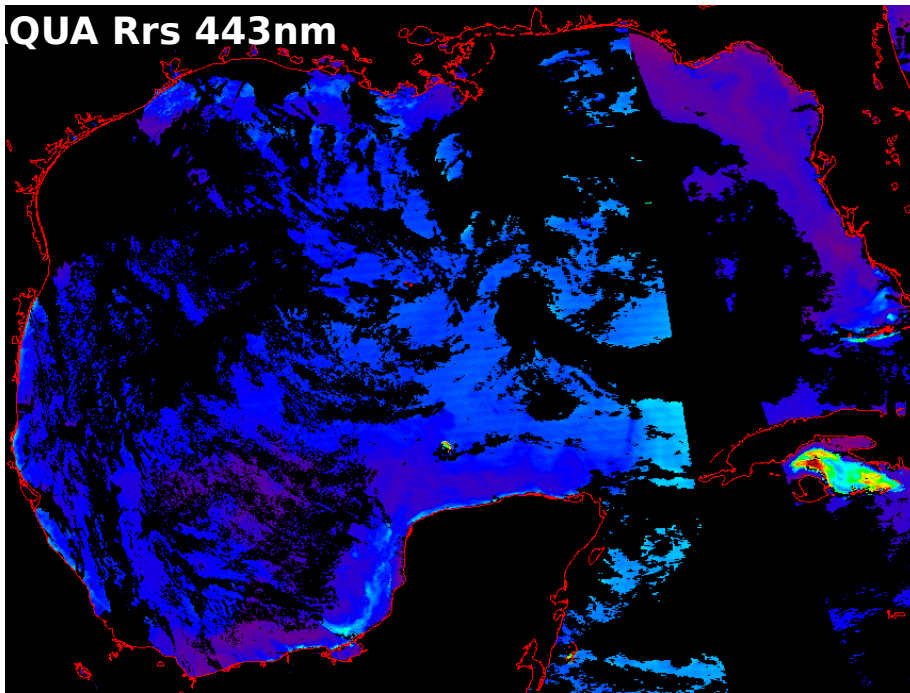
MODIS - 1945, 1950 GMT

VIIRS - 1944, 1945, 1947 GMT

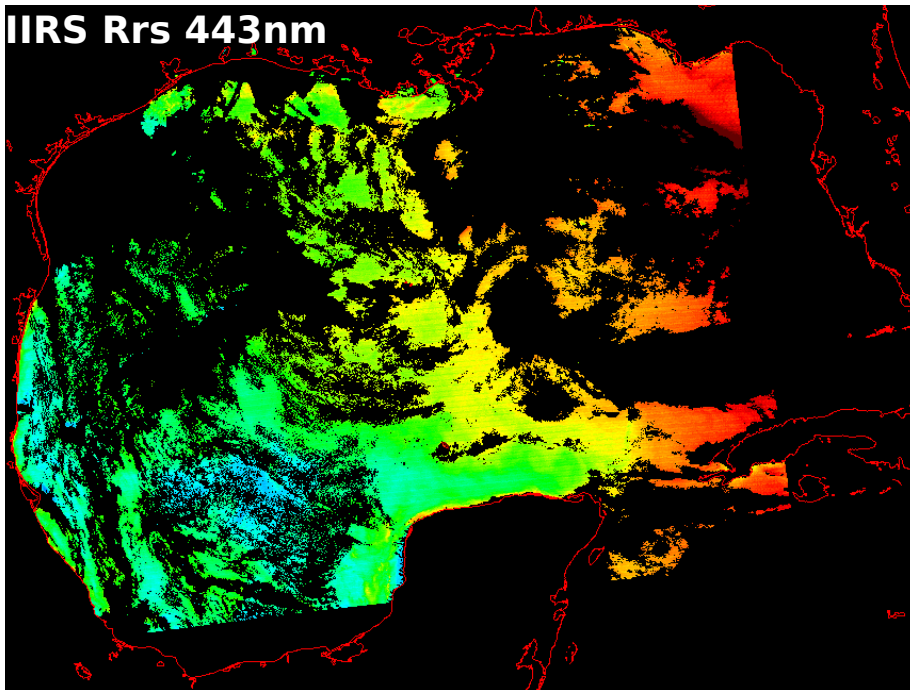




**QUA Rrs 443nm**



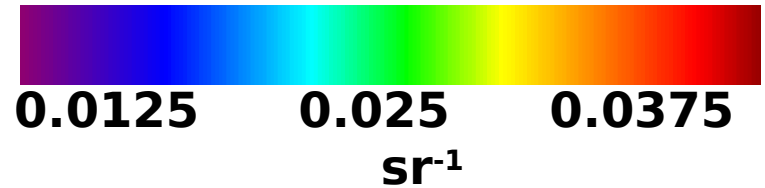
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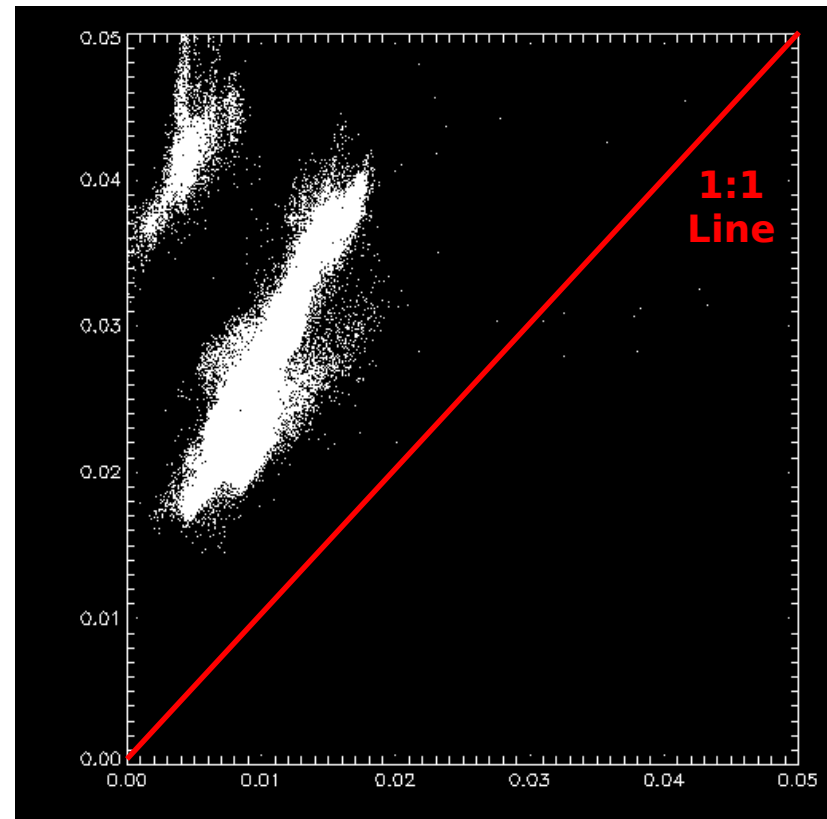
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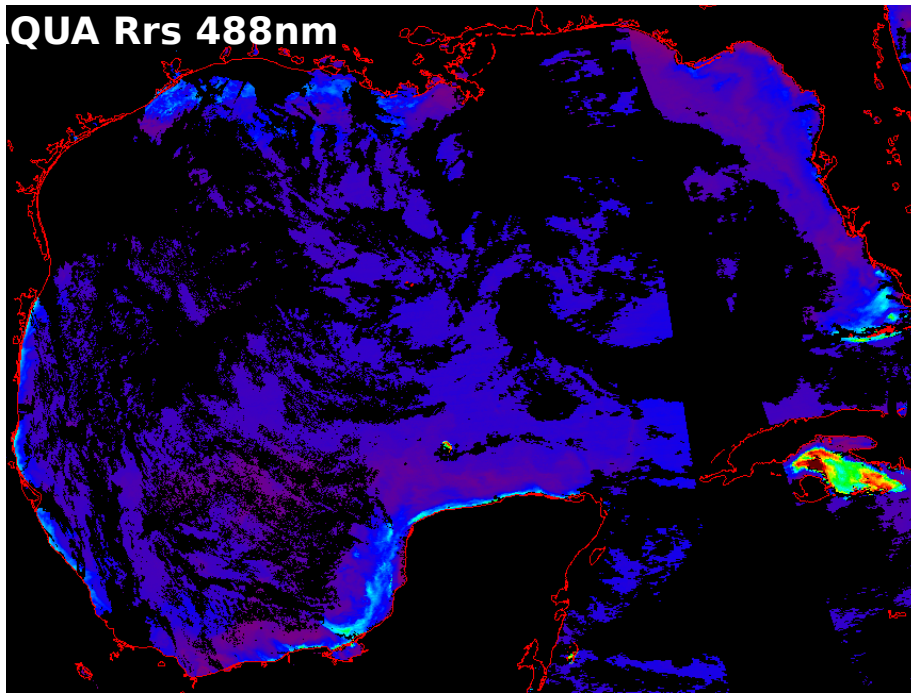


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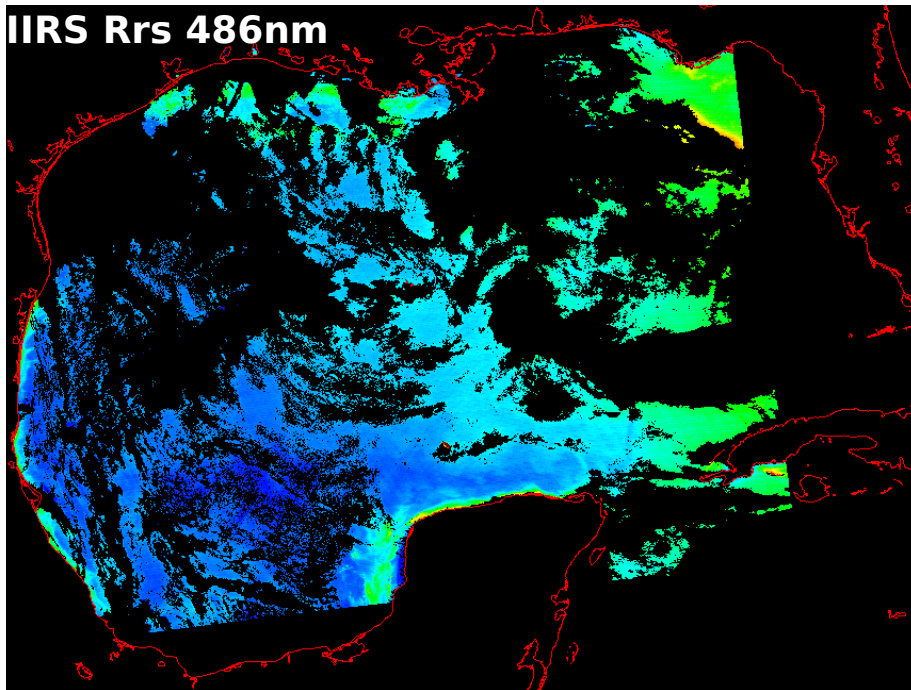


**AQUA Rrs 443nm**

**QUA Rrs 488nm**



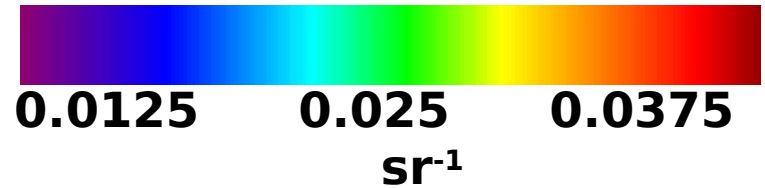
**VIIRS Rrs 486nm**



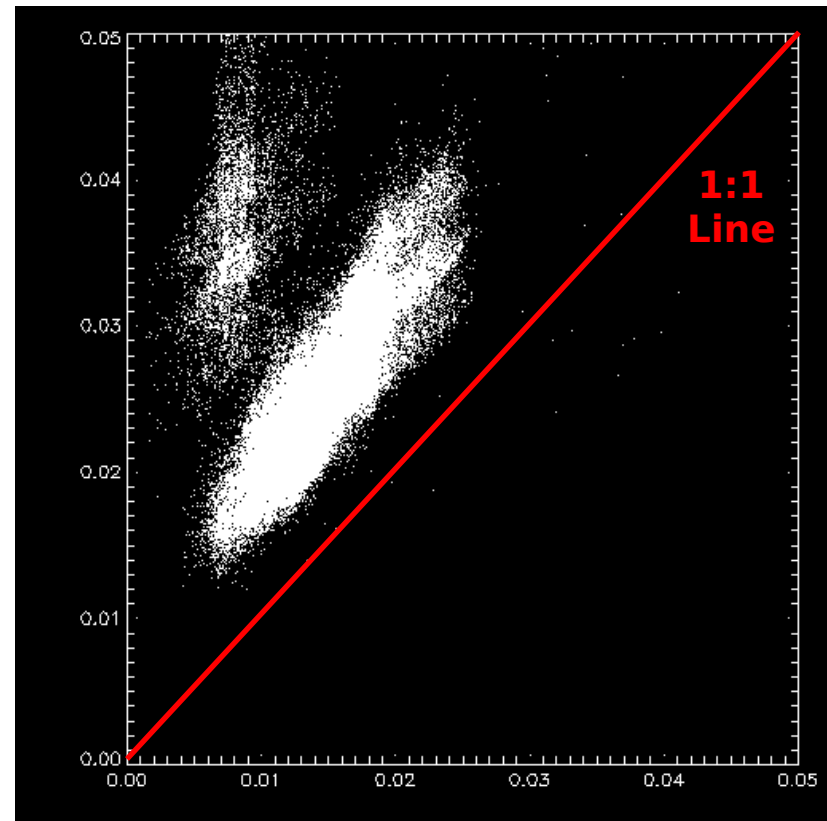
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VIIRS - 1944, 1945, 1947 GMT

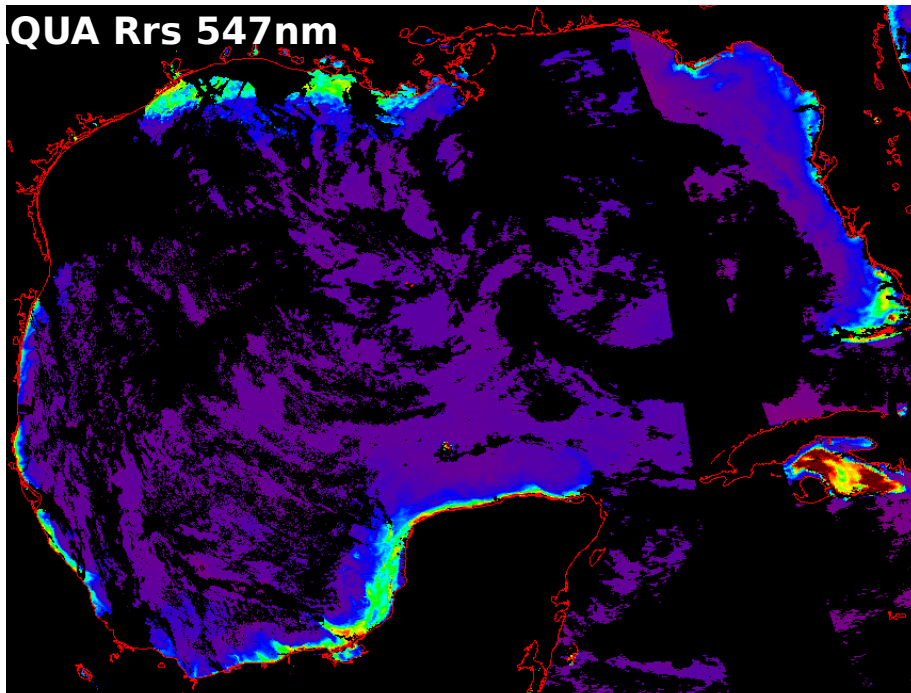


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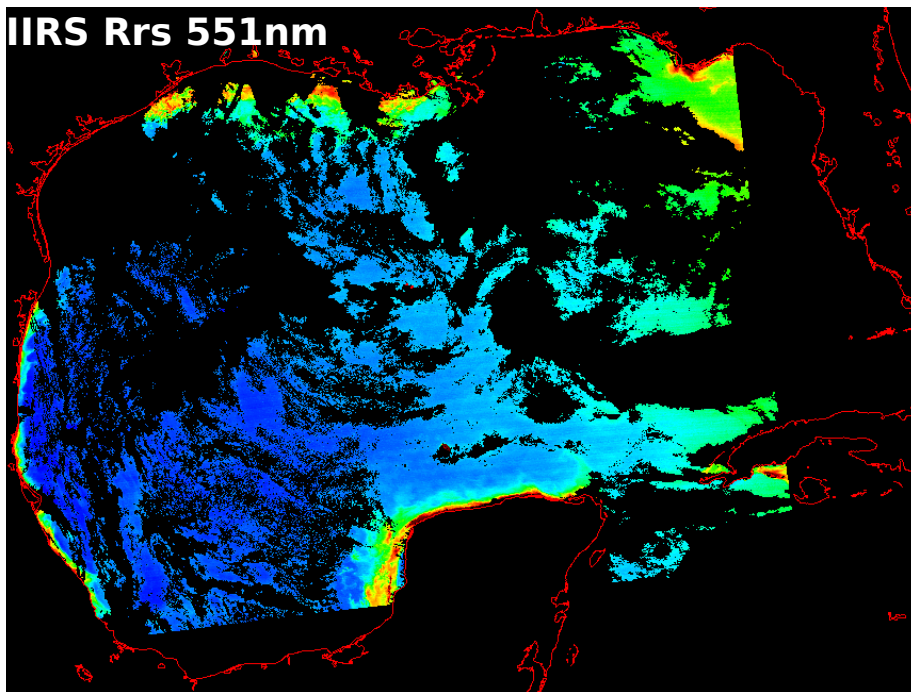


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**QUA Rrs 547nm**



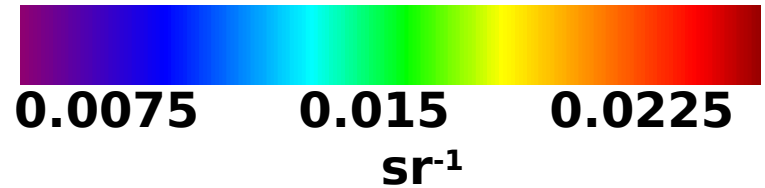
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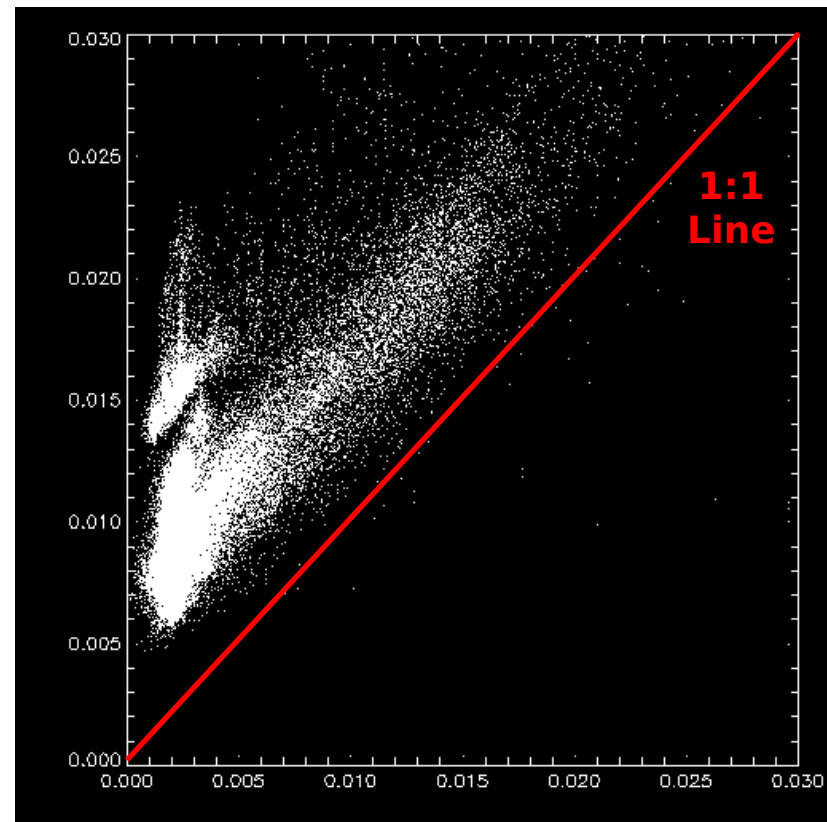
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MODIS - 1945, 1950 GMT

VIIRS - 1944, 1945, 1947 GMT



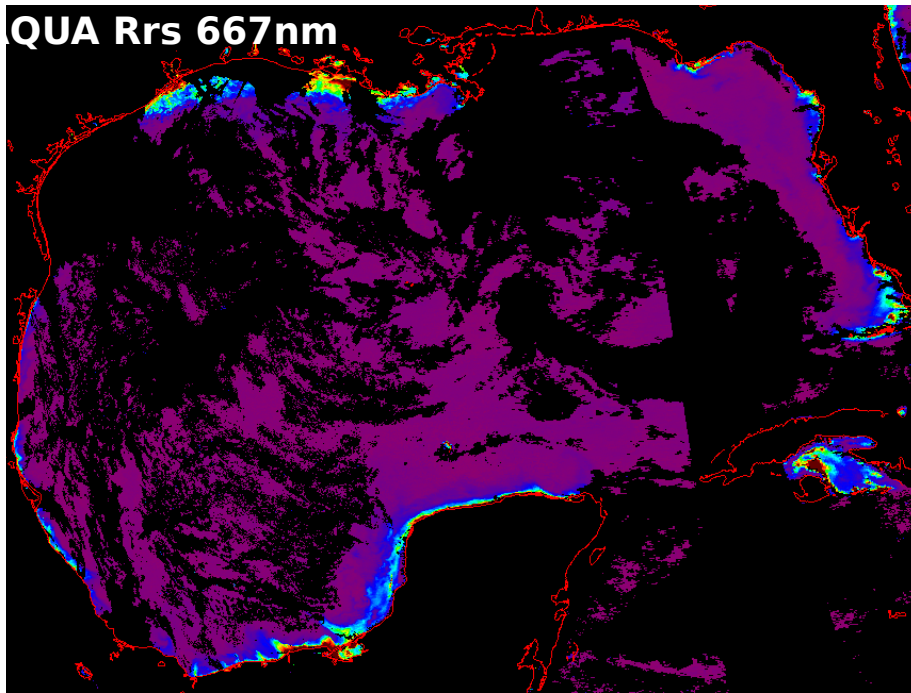
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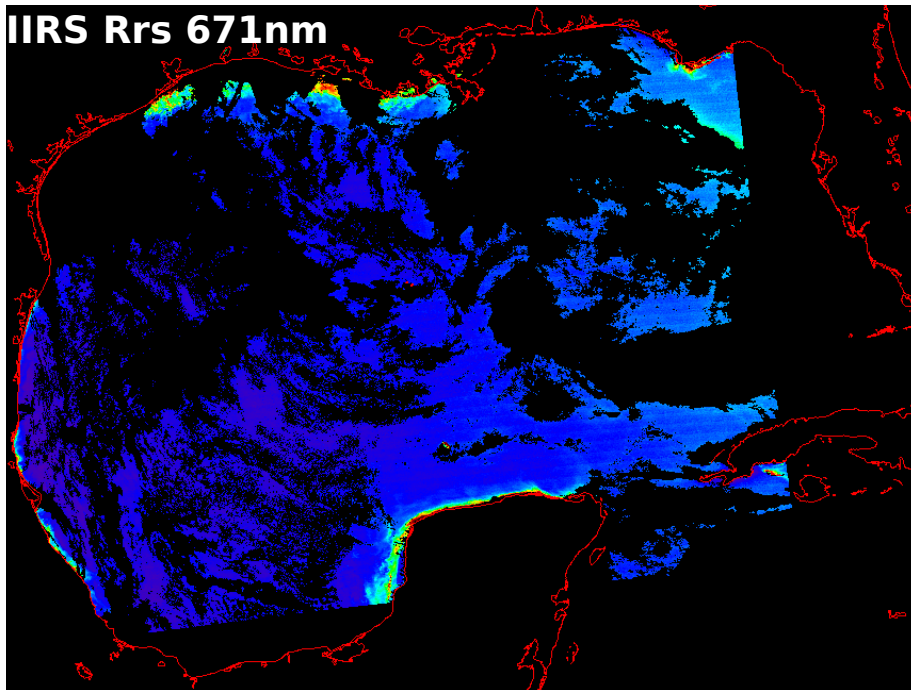
**AQUA Rrs 547nm**



**QUA Rrs 667nm**



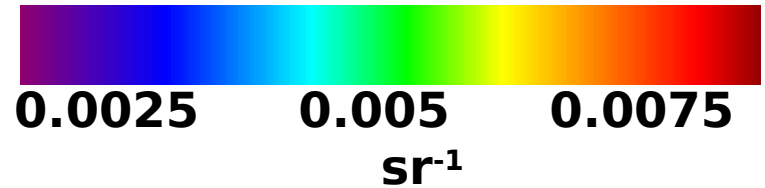
**VIIRS Rrs 671nm**



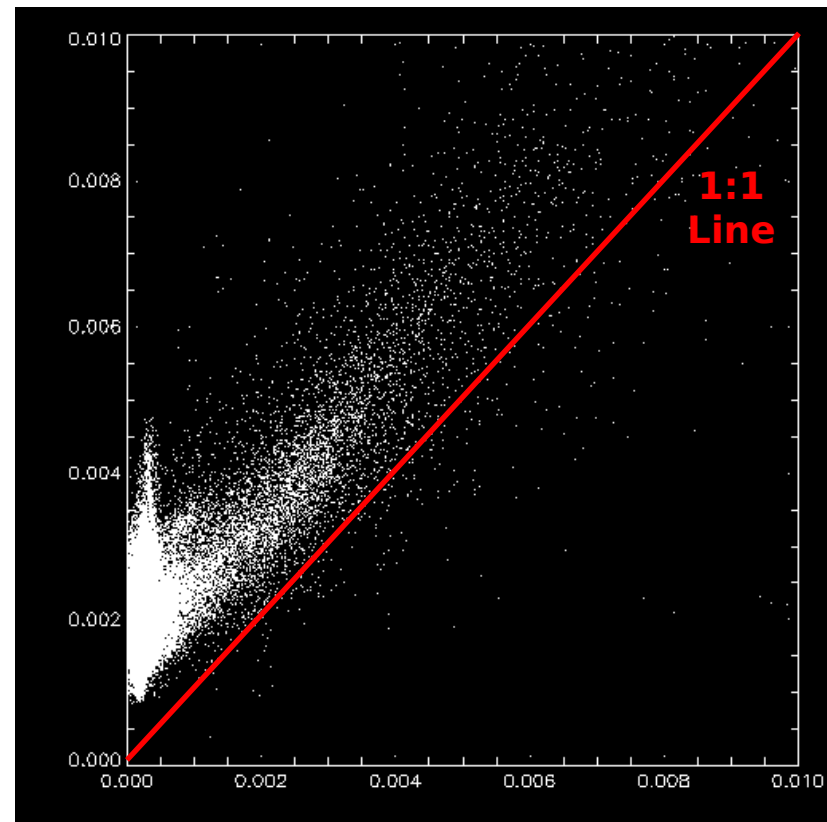
# MODIS Aqua / VIIRS Matchup November 21, 2011 (JDAY 325)

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VIIRS - 1944, 1945, 1947 GMT

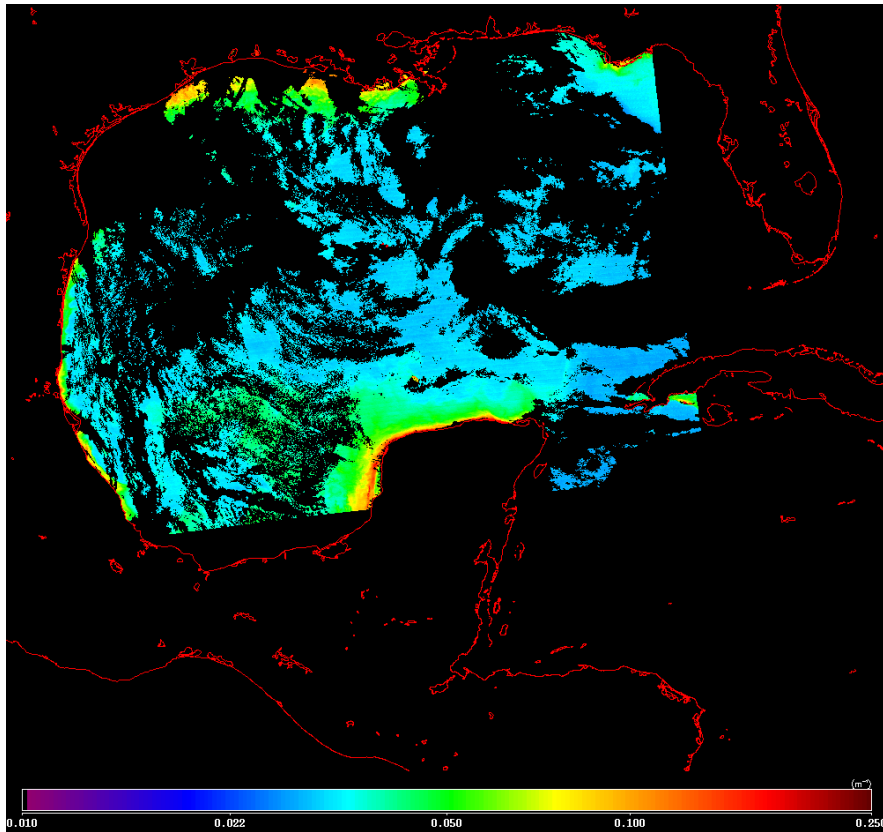


**VIIRS Rrs 671nm**

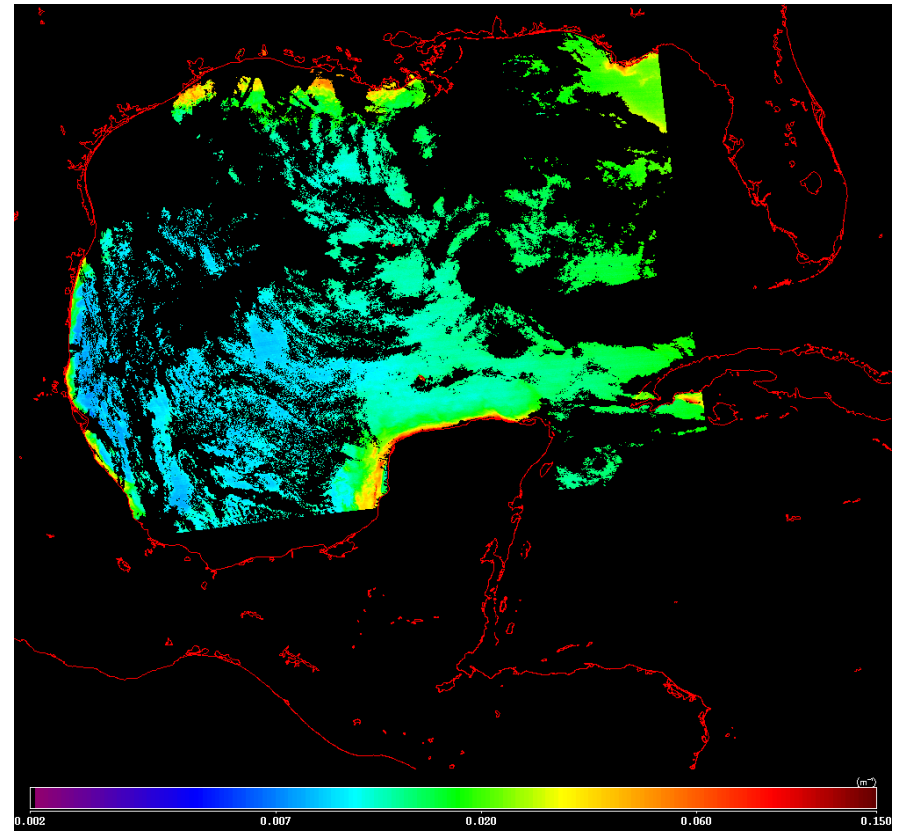


**AQUA Rrs 667nm**

# NPP



Absorption 443



Bb 551

# Evaluation of IDPS EDR

- Comparison of the nLw IDPS and L2gen



# val team -Ocean products and files

<http://www7331.nrlssc.navy.mil/outgoing/viirs/>

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# Golden regions

## Ongoing products

tp://www7333.nrlssc.navy.mil/savar

## ERONET Matchup Sites

http://www7331.nrlssc.navy.mil/browse/lvl3/viirs/

[Parent Directory](#)

[AAOT/](#)

[BoussoleBuoy/](#)

[CalCOFI/](#)

[GDAT/](#)

[GageochoSeaprism/](#)

[Gloria/](#)

[Gomex/](#)

[GreatLakes1km/](#)

[Helsinki/](#)

[LigurianSea/](#)

[LucindaJetty/](#)

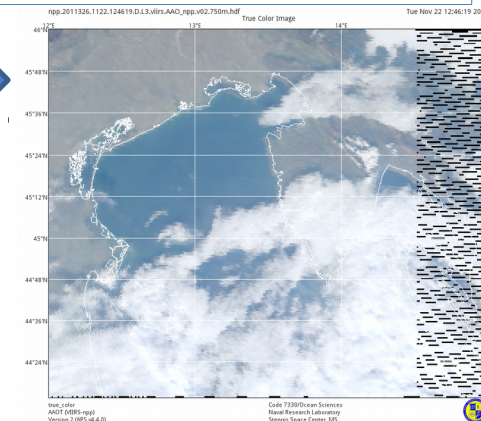
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[Palgrunden/](#)

[PersianGulf/](#)

[WaveCIS/](#)



## Draft products

### Parent Directory

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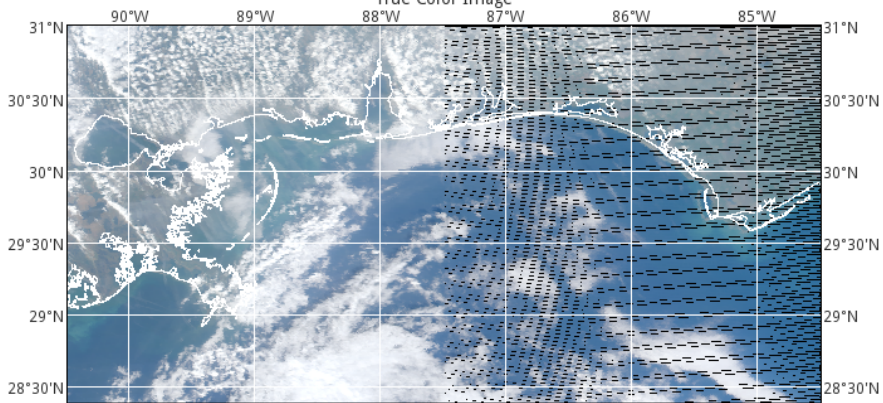
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# Using SWIR

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True Color Image



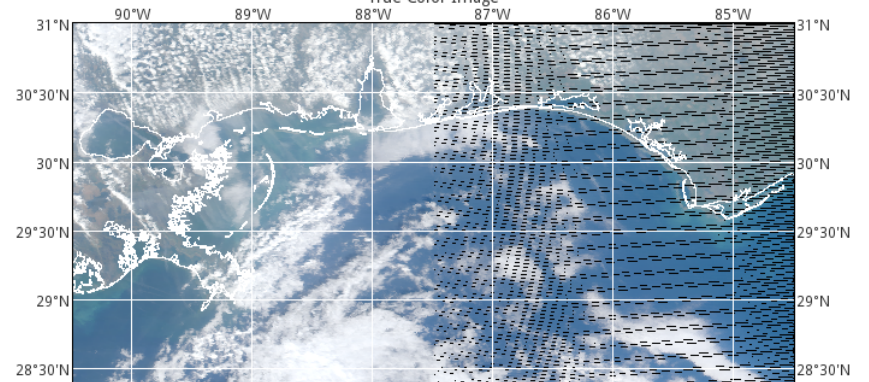
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Mississippi Bight (VIIRS-npp)  
Version 2 (APS v4.4.0)

Code 7330/Ocean Sciences  
Naval Research Laboratory  
Stennis Space Center, MS



# Using NIR

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True Color Image

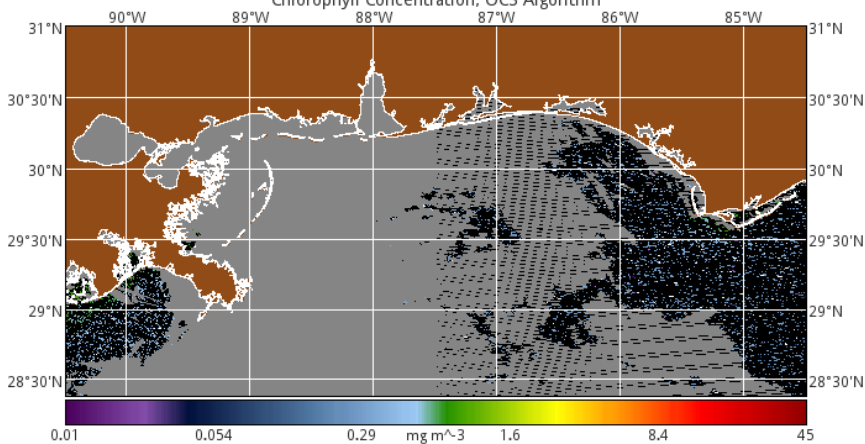


true\_color  
Mississippi Bight (VIIRS-npp)  
Version 2 (APS v4.4.0)

Code 7330/Ocean Sciences  
Naval Research Laboratory  
Stennis Space Center, MS



npp.2011325.1121.D.L3\_Mosaic.viirs.MSB\_npp\_swir.v02.750m.hdf Mon Nov 21 2011 Mosaic  
Chlorophyll Concentration, OC3 Algorithm

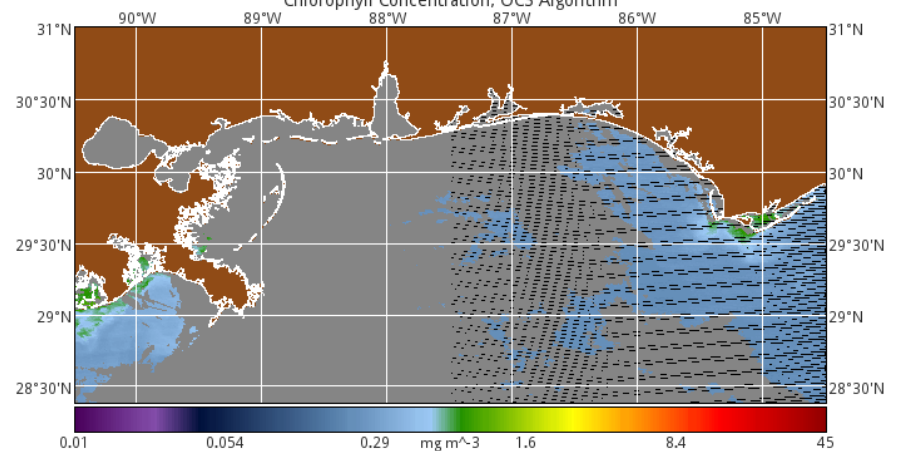


CLDICE LAND ATMFAIL HILT  
chlor\_a (provisional)  
Mississippi Bight (VIIRS-npp)  
Version 2 (APS v4.4.0)

Code 7330/Ocean Sciences  
Naval Research Laboratory  
Stennis Space Center, MS



npp.2011325.1121.D.L3\_Mosaic.viirs.MSB\_npp.v02.750m.hdf Mon Nov 21 2011 Mosaic  
Chlorophyll Concentration, OC3 Algorithm



CLDICE LAND ATMFAIL HILT  
chlor\_a (provisional)  
Mississippi Bight (VIIRS-npp)  
Version 2 (APS v4.4.0)

Code 7330/Ocean Sciences  
Naval Research Laboratory  
Stennis Space Center, MS



# NRL SSC Direct Broadcast

TeraCapCon

System Schedule Search Help

Pass Filter

☐ In-View ☒ Scheduled ☐ Auto-Sched ☐ Online ☐ Cataloged

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Help

Status	Satel	Telem	Date	Time	Durat	Notes
02	terra-1	teradb	2011/11/28	18:16:20 07:10	Elv:8 Az:292	Lines:2801 Cap:done Arch:none Cat:no
050	noaa-18	hrpt	2011/11/28	18:29:20 09:30	Elv:11 Az:67	Lines:3135 Cap:done Arch:none Cat:no
0104	npp	nppdb	2011/11/28	19:08:10 14:00	Elv:69 Az:261	Lines:70 Cap:done Arch:none Cat:no
051	noaa-18	hrpt	2011/11/28	20:06:50 14:30	Elv:76 Az:260	Lines:4962 Cap:done Arch:none Cat:no
052	noaa-19	hrpt	2011/11/28	20:59:20 05:00	Elv:4 Az:274	Lines:1785 Cap:done Arch:none Cat:no
053	noaa-18	hrpt	2011/11/28	21:52:40 05:30	Elv:5 Az:273	Lines:1978 Cap:done Arch:none Cat:no
054	noaa-16	hrpt	2011/11/29	00:54:20 13:40	Elv:43 Az:75	Lines:4729 Cap:done Arch:none Cat:no
055	noaa-16	hrpt	2011/11/29	02:35:50 12:10	Elv:19 Az:268	Lines:4382 Cap:done Arch:none Cat:no
03	terra-1	teradb	2011/11/29	03:36:30 12:30	Elv:45 Az:77	Lines:5339 Cap:done Arch:none Cat:no
04	terra-1	teradb	2011/11/29	05:15:40 09:50	Elv:13 Az:270	Lines:4388 Cap:done Arch:none Cat:no
0105	npp	nppdb	2011/11/29	05:55:30 06:10	Elv:5 Az:87	Lines:0 Cap:failed Arch:none Cat:no
056	noaa-18	hrpt	2011/11/29	06:57:50 06:30	Elv:6 Az:87	Lines:1547 Cap:done Arch:none Cat:no
0106	npp	nppdb	2011/11/29	07:32:10 14:10	Elv:81 Az:101	Lines:1139 Cap:done Arch:none Cat:no
057	noaa-18	hrpt	2011/11/29	08:35:10 14:30	Elv:79 Az:101	Lines:5201 Cap:done Arch:none Cat:no
0107	npp	nppdb	2011/11/29	09:14:20 09:00	Elv:10 Az:293	Lines:328 Cap:done Arch:none Cat:no
058	noaa-18	hrpt	2011/11/29	10:17:40 09:30	Elv:11 Az:293	Lines:3418 Cap:done Arch:none Cat:no
059	noaa-16	hrpt	2011/11/29	13:22:00 13:30	Elv:30 Az:95	Lines:4589 Cap:done Arch:none Cat:no
060	noaa-16	hrpt	2011/11/29	15:02:40 13:10	Elv:28 Az:287	Lines:4639 Cap:done Arch:none Cat:no
05	terra-1	teradb	2011/11/29	15:42:20 10:50	Elv:19 Az:92	Lines:3930 Cap:done Arch:none Cat:no
0108	npp	nppdb	2011/11/29	17:13:30 07:00	Elv:7 Az:65	Lines:0 Cap:failed Arch:none Cat:no
062	noaa-19	hrpt	2011/11/29	17:25:40 08:50	Elv:9 Az:66	Lines:2604 Cap:done Arch:none Cat:no
0109	npp	nppdb	2011/11/29	18:49:20 14:10	Elv:78 Az:80	Lines:58 Cap:done Arch:none Cat:no
021	oceansat-	ocm	2011/11/29	19:07:00 00:00	Elv:15 Az:289	Lines:0 Cap:failed Arch:none Cat:no
0110	npp	nppdb	2011/11/29	20:32:40 00:00	Elv:9 Az:272	Lines:0 Cap:failed Arch:none Cat:no
063	noaa-16	hrpt	2011/11/30	00:42:30 13:30	Elv:33 Az:74	Lines:4802 Cap:done Arch:none Cat:no
S+	noaa-16	hrpt	2011/11/30	02:23:30 12:50	Elv:25 Az:263	Pri:2 Arc:nnn Proc:avh_process
S+	terra-1	teradb	2011/11/30	02:43:50 08:50	Elv:11 Az:66	Pri:5 Arc:nnn Proc:None
S+	terra-1	teradb	2011/11/30	04:19:00 12:40	Elv:57 Az:259	Pri:5 Arc:nnn Proc:None
S+	noaa-19	hrpt	2011/11/30	05:55:10 03:50	Elv:4 Az:89	Pri:2 Arc:nnn Proc:avh_process
S+	npp	nppdb	2011/11/30	07:13:40 13:40	Elv:52 Az:101	Pri:1 Arc:nnn Proc:None
S+	noaa-19	hrpt	2011/11/30	07:31:10 14:30	Elv:68 Az:102	Pri:2 Arc:nnn Proc:avh_process
S+	noaa-18	hrpt	2011/11/30	08:24:10 14:30	Elv:62 Az:102	Pri:2 Arc:nnn Proc:avh_process
S+	npp	nppdb	2011/11/30	07:13:40 13:40	Elv:52 Az:101	Pri:1 Arc:nnn Proc:None

Show Coverage

Schedule In-View

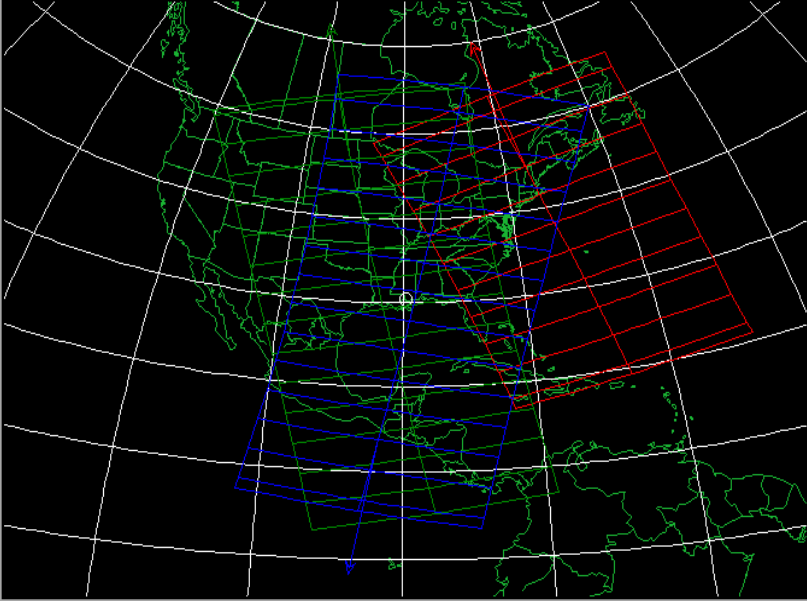
Edit Scheduled

Edit Process

Delete Pass

2011/11/30 01:41:04

Show Coverage



Zoom 

+

-

Reset

 Receiver Site 

Current 30.37n 89.61w

Selection

☒ Red

0103 npp nppdb 2011/11/28 17:30:40 09:50

viirs

☒ Green

0104 npp nppdb 2011/11/28 19:08:10 14:00

viirs

☒ Blue

0106 npp nppdb 2011/11/29 07:32:10 14:10

viirs

Close

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Help

Tracking NPP .

Limited data collection .

Background Noise problem with 780 m

SeaSpace